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				Application Number	10/501,791	
INE	ODMATI	ON DISC	LOSURE	Filing Date	July 2, 2004	
				First Named Inventor	Yoshifumi Kachi	
SIA		T BY API		Art Unit	1763	
	(Use as mai	ny sheets as nece	ssary)	Examiner Name	Ram N. Kackar	
Sheet	1	of	1	Attorney Docket Number	39.026-AG	

			U. S. PATENT D	OCUMENTS	
Examiner Initials*	Cite No.'	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	To
F1	JP-2002-252269-A	09-06-2002	Toshiba Ceramics		~
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	F1 F2	Cite No.1 Foreign Patent Document Country Code3 Number 1 Kind Code3 (if known) F1 JP-2002-252269-A F2 JP-2001-244320-A	Cite No. 1 Foreign Patent Document Publication Date MM-DD-YYYY F1 JP-2002-252269-A 09-06-2002 F2 JP-2001-244320-A 09-07-2001	Cite No. ¹ Foreign Patent Document Publication Date MM-DD-YYYY Name of Patentee or Applicant of Cited Document F1 JP-2002-252269-A 09-06-2002 Toshiba Ceramics F2 JP-2001-244320-A 09-07-2001 Ibiden	No. 1 Country Code ³ *Number 4 * Kind Code ³ (if known) Date MM-DD-YYYY Applicant of Cited Document MM-DD-YYYY Where Relevant Passages Or Relevant Figures Appear F1 JP-2002-252269-A 09-06-2002 Toshiba Ceramics F2 JP-2001-244320-A 09-07-2001 Ibiden

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Translation is attached.

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PTC/SB/08A (10-01)
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Under the Peperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449A/PTO **Application Number** (To be assigned) INFORMATION DISCLOSURE March 20, 2003 [371(c) date] Filing Date STATEMENT BY APPLICANT First Named Inventor Yoshifumi Kachi Arl Unit (To be assigned) (use as many sheets as necessary) Examiner Name (To be assigned) Sheet of 1 Attorney Docket Number 39,026-AG

			U.S. PATE	NT DOCUMENTS	
Examiner initiats		Document Number Number - Kind Code ² (<i>ii know</i>	Publication Date	Name of Petentee or Applicant of Clied Document	Pages, Cotumns, Lines, Where Relevant Passages or Relevant Figures Appear
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Examiner Initials	Cite No.1	Foreign Patent Document Coursy Code 3 - Number 4 - Kind Code 6 stanoist)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	το
SC	FT	EP-1-199-908-A1	04-24-2002	Ibiden Co., Ltd.		
sc	F2	JP-2002-025750-A	01-25-2002	Ibiden Co., Ltd.		~
SC	F3	WO-01/63972-A1	08-30-2001	Ibiden Co., Ltd.		1
. sc	F4	JP-H06-028258-B2	04-13-1994	NGK Insulators Ltd.		~
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1	Examiner	/Satish Chandra/	Date	08/21/2006
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				Application Number	(To be assigned)	
INFO	RMATIO	N DIS	CLOSURE	Filing Date	March 20, 2003 [371(c) date]	
STA	TEMENT	BY A	PPLICANT	First Named Inventor	Yoshifumi Kachi	
				Art Unit	(To be assigned)	
((use as many sheets as necessary)			Examiner Name	(To be assigned)	
Sheet	1	of	1	Attorney Docket Number	39.026-AG	

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Examiner Initials		Document Number Number - Kind Code ² (if known	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear					
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50	F1	EP-1-199-908-A1	04-24-2002	Ibiden Co., Ltd.		
	F2	JP-2002-025750-A	01-25-2002	Ibiden Co., Ltd.		~
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4	F4	JP-H06-028258-B2	04-13-1994	NGK Insulators Ltd.		~
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Substi	tute for form 1449/PT	0		Complete if Known			
0000				Application Number	10/501,791		
INI	FORMATIC	W DISCI	OSLIDE	Filing Date	July 2, 2004		
				First Named Inventor	Yoshifumi Kachi		
ST	ATEMENT			Art Unit	1763		
	(Use as many	sheets as necess	ery)	Examiner Name	Ram N. Kacker		
Sheet	1	of	1	Attorney Docket Number	39.026-AG		

Examiner	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	Country Code ³ "Number ⁴ "Kind Code ⁶ (if known)				
F1	JP-2002-252269-A	09-06-2002	Toshiba Ceramics		~
F2	JP-2001-244320-A	09-07-2001	Ibiden		~
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	No.1 F1 F2	Country Code ³ "Number ⁴ "Kind Code ⁶ (# known) F1 JP-2002-252269-A F2 JP-2001-244320-A	Foreign Patent Document Publication Date MM-DD-YYYY	Foreign Patent Document Publication Date MM-DD-YYYY	No.1 Country Code ³ "Number ⁴ "Kind Code ⁶ (# known) Date MM-DD-YYYY Applicant of Cited Document MM-DD-YYYY Where Relevant Passages Or Relevant Figures Appear F1 JP-2002-252269-A 09-06-2002 Toshiba Ceramics F2 JP-2001-244320-A 09-07-2001 Ibiden

Examiner	(Catich Chandra)	Date	08/21/2006
Signature	/Satish Chandra/	Considered	00/21/2000

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